



THE UNIVERSITY *of* EDINBURGH

## Edinburgh Research Explorer

### **Saving our Seas through Law Briefing No. 3 - Using Marine Spatial Planning to Support Marine Protected Area Management: A case study of the Clyde Region**

#### **Citation for published version:**

Harrison, J 2019, *Saving our Seas through Law Briefing No. 3 - Using Marine Spatial Planning to Support Marine Protected Area Management: A case study of the Clyde Region*. Edinburgh Law School.

#### **Link:**

[Link to publication record in Edinburgh Research Explorer](#)

#### **Document Version:**

Publisher's PDF, also known as Version of record

#### **General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

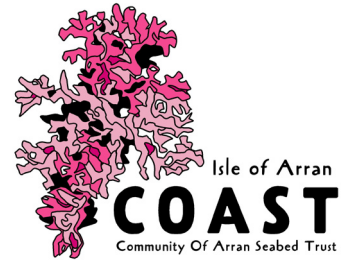
#### **Take down policy**

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact [openaccess@ed.ac.uk](mailto:openaccess@ed.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.





THE UNIVERSITY *of* EDINBURGH  
Edinburgh Law School



# Using Marine Spatial Planning to Support Marine Protected Area Management

A Case Study of the Clyde Region

Saving our Seas through Law Policy Brief Series | Briefing No. 3





# Using Marine Spatial Planning to Support Marine Protected Area Management

This policy brief considers the relationship between marine spatial planning and marine protected area management. The policy brief seeks to identify the key opportunities to utilise marine spatial planning in order to strengthen protection of marine ecosystems by drawing upon relevant international law and policy, as well as best practices from around the United Kingdom. The policy brief uses the proposed draft marine spatial plan for the Clyde Marine Region as a case study and it recommends strategies to ensure more integrated and effective protection of natural heritage in regional marine plans.

## Key Recommendations

- Regional marine plans are a key informational document for developers and members of the public and they should therefore provide detailed information on the key marine nature conservation designations within the marine region, including the names, locations and protected features of Nature Conservation Marine Protected Areas (MPAs) and European Marine Sites.
- In order to ensure that appropriate weight is given to nature conservation policies, relevant policies should be expressed in prescriptive language, using terms such as 'must' or 'shall' instead of 'should'.
- Regional marine plans will only fulfil their potential as tools to balance competing uses of the marine environment and ensure the integrity of marine ecosystems if they are ambitious in their content and their policies go above and beyond the general prescriptions of the National Marine Plan. Regional marine plans also provide an opportunity to go beyond the minimum requirements of conserving the protected features of MPAs through the adoption of policies to encourage the enhancement of these areas in order to ensure their overall resilience. Consideration should therefore be given to using regional marine plans to minimise negative pressures on MPAs by limiting new developments or activities within or in the vicinity of these areas. Where appropriate, nature conservation considerations should be integrated into sectoral policies in order to highlight restrictions on a particular type of development or activity, using ocean zoning as a planning tool where feasible.
- Particular attention should be paid by regional marine plans to ensuring that species or habitats in unfavourable conservation status are not affected by development or other activities by expressly identifying the relevant features and the precautionary steps that must be taken to ensure their protection.
- Regional marine plans should emphasise the regeneration of natural carbon sinks by establishing buffer zones around suitable sites in order to allow these features to expand, free from the pressures of new activities or developments.
- Regional marine plans should include a specific policy on cumulative impacts of activities and developments.

## Regional Marine Plans and Marine Protected Areas

Marine spatial planning (MSP) is a recent development in planning policy, which aims to coordinate regulatory responses to increasing pressure on marine resources and spaces from multiple competing uses. Scotland introduced MSP under the Marine (Scotland) Act 2010, which calls for the development of a National Marine Plan, as well as supplementary marine plans at the regional level.<sup>1</sup> These plans are important because decision-makers will be required to 'take any authorisation or enforcement decision in accordance with the appropriate marine plans, unless relevant considerations indicate otherwise'<sup>2</sup> and 'have regard to' the plan in making any other decisions.<sup>3</sup> The Clyde Regional Marine Plan (RMP) will be among the first of its kind in Scotland and will therefore become a benchmark for subsequent plans.

MSP is often linked to the ecosystems approach, as it assumes a holistic perspective on marine management.<sup>4</sup> The introduction of MSP thus provides an important opportunity to bolster marine environmental protection, including Marine Protected Areas (MPAs). In this respect, the Marine (Scotland) Act 2010 requires a RMP to include 'policies (however expressed) for and in connection with the sustainable development of the area to which the plan applies [and] policies on the contribution of Nature Conservation MPAs ... to the protection and enhancement of the area to which

the plan applies.<sup>15</sup> One would therefore expect MPAs to feature centrally in a RMP, with clear and precise policies to demonstrate how the plan contributes to the protection of these important ecological sites.

There are several other drivers which should also influence the manner in which RMPs address MPAs.

Firstly, a RMP must be compatible with the National Marine Plan<sup>6</sup>, which itself highlights certain policy objectives relating to natural heritage. The drafting of a RMP provides an opportunity to develop more specific policies in order to implement these general national policies at the regional level. Indeed, the National Marine Plan explicitly identifies a number of issues which should be addressed in this context.

#### Regional marine plans should consider:

- Using relevant guidance and data sources to identify, where appropriate, areas that are sensitive to specific types of development or other activity. Particular regard should be given to protected sites, protected species and Priority Marine Features. Spatial policies should take account of the sensitivities identified.
- Developing policies that contribute to the achievement of Conservation Objectives for designated sites within the MPA network.
- Recognising the role of habitats and species in providing and supporting ecosystem services and consider opportunities to enhance these services.

*Source: Scotland's National Marine Plan (2015)*

Secondly, RMPs must be implemented in line with the broader legal framework, including the national outcomes adopted under the Community Empowerment (Scotland) Act 2015<sup>7</sup> and the duty of every public body to 'further the conservation of biodiversity.'<sup>18</sup> This latter obligation highlights the role that international law may play in influencing the development of planning policy. Relevant treaties on the conservation of biological diversity are not solely



concerned with the designation of protected areas, but also demand appropriate protection of ecosystem functions at larger scales.<sup>9</sup> Effective marine spatial planning can contribute to this aim by overcoming shortcomings in MPA networks, ensuring that MPAs are protected from degradation arising from the surrounding area, and promoting connectivity of MPAs.<sup>10</sup> In this context, the OSPAR Commission has highlighted 'the further development and implementation of tools such as marine spatial planning' as a main strategic direction for North-East Atlantic States in protecting marine biological diversity<sup>11</sup> and the Parties to the Convention on Biological Diversity (CBD) have also identified the need for better protected area integration, which they defined as 'the process of ensuring that the design and management of protected areas, corridors and the surrounding matrix fosters a connected, functional ecological network.'<sup>12</sup> To this end, Parties to the CBD were called upon to 'review and adapt landscape and seascape plans, including ... marine spatial plans ... in order to improve connectivity and complementarity and reduce fragmentation and impacts.'<sup>13</sup> Whilst this guidance is voluntary, it provides best practice to which the Scottish Government should aspire if it is to be a leader in the protection of the marine environment.

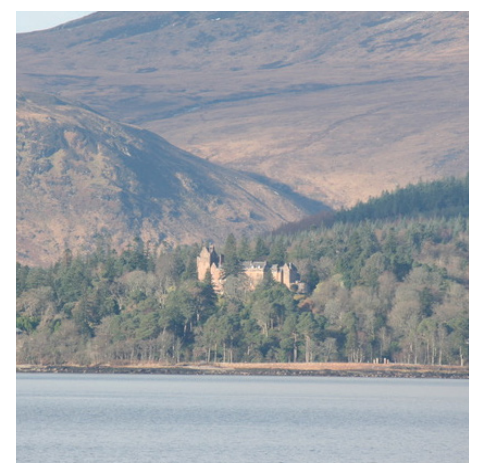
### Approach of the Draft Clyde RMP to Natural Heritage and Marine Protected Areas

MPAs are largely addressed in Chapter 5 of the pre-consultation draft of the Clyde RMP, focussing on natural heritage. There are four natural heritage objectives and seven policies which are split into authorisation and consent policies and management policies. These range from the general - Objective NH1 seeks that '[t]he health of the marine

and coastal natural heritage of the Clyde Marine Region is protected and, where appropriate, enhanced' – to more specific policies addressing particular aspects of nature conservation. Objective NH2 explicitly refers to MPAs:

*'Development and use of the coastal and marine environment does not have significant negative impact on biodiversity, the Marine Protected Area network, other protected habitats and species and Priority Marine Features in line with the relevant conservation objectives and, where possible, contributes to their maintenance and/or enhancement'.*

This is a welcome objective, but when it comes to particular policies in order to achieve this objective, the draft RMP does little more than reiterate requirements to 'comply with international, national and local legal requirements for protected areas and species' or repeat the stipulations of the National Marine Plan, such as preventing 'significant impact on the national status of Priority Marine Features' or 'protect and, where appropriate, enhance the health of the marine area.' Policy NH1 does appear to go a little further than the National Marine Plan by saying that 'where Priority Marine Features are known or found





to exist, licence applications should demonstrate consideration of sensitivities and potential impacts through tools such as the Feature Activity Sensitivity Tool', but it is noticeable that it employs non-prescriptive language. It is recommended that this language is amended to make it clear that licence applications must demonstrate consideration of potential impacts. Policy NH2 also provides some further clarification of the situations in which a development proposal will be supported, including if they 'contribute to the delivery of the conservation objectives of Marine Protected Areas where appropriate,' but this policy suffers from significant ambiguity. Indeed, it is reflective of broader shortcomings in the draft RMP, which lacks in detail as to the measures that should be taken to enhance marine biological diversity in the Clyde marine region. The following section will highlight several modest but important improvements that can be made in order to strengthen the RMP in this respect.

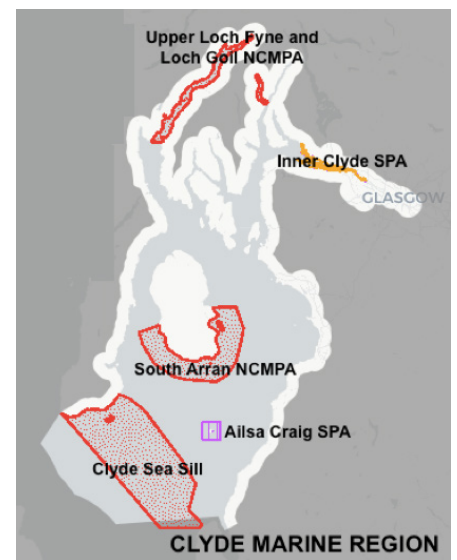
### Shortcomings and Proposed Changes to the Clyde RMP

Marine spatial plans must be sufficiently detailed in order to provide clear guidance to decision-makers and developers as to how to act to achieve the objectives of the plan. The inclusion of a minimum level of information is also important because marine spatial plans play an additional educational function by highlighting the key attributes of an area.<sup>14</sup> These objectives are not achieved if it is necessary to cross-reference a range of other documents in order to understand the scope and substance of the policies. In this regard, the draft Clyde RMP falls short in a number of respects. Whilst it is welcome that there are specific policies addressing MPAs and priority marine features, the current policies relating

to natural heritage in the draft Clyde RMP are too abstract and a number of improvements could be made.

At present, the draft Clyde RMP does not even name the MPAs and other significant nature designations that are present in the Clyde marine region, let alone the features for which they are protected. This can be contrasted with existing marine plans already developed in other Scottish regions, such as the non-statutory Shetland Islands Marine Spatial Plan (Fourth Edition 2015) which lists and describes the two nature conservation MPAs in the plan area.<sup>15</sup> This practice should be followed by the Clyde RMP. It is therefore recommended that Chapter 5 of the draft RMP incorporates a description of the three Nature Conservation MPAs located in the Clyde region and explain their protected features, as well as other important nature designations.

Nor does the draft Clyde RMP expressly recognise that certain marine species/habitats are under greater threats than others. The Clyde marine region is home to a number of species which have an unfavourable conservation status or are in decline, including a number of species within MPAs, such as the flame shell beds in the Upper Loch Fyne and Loch Goil MPA and the maerl beds in the South Arran MPA. Several species of sea birds are also in decline.<sup>16</sup> Given the precarious status of these ecosystems and the need for a precautionary approach to their management<sup>17</sup>, it is incumbent on the drafters of the plan to place greater emphasis on ecosystem recovery by expressly recognising that active steps must be taken in this direction. It is recommended that a policy is explicitly included in the RMP to require decision-makers to exercise caution when considering proposals for devel-



*The main nature conservation designations in the Clyde marine region*

opments or activities which may impact upon those species and habitats in unfavourable condition.

There are certain species for which steps should be taken not only to promote their recovery within existing limits, but also to encourage their active enhancement and expansion. In this category, one can highlight habitats which play a vital ecosystem service as carbon sinks. It is welcome that Policy CC2 of the draft Clyde RMP already acknowledges the important role of such habitats by providing that 'development(s) and/or activities will be supported where they can demonstrate that they will avoid damage to and/or, where possible, enhance the capacity of recognised carbon sinks in the Clyde Marine Region.' Yet, given the urgency of addressing climate change and ocean acidification, recognised by the recent declaration of a climate emergency by the First Minister<sup>18</sup>, the Clyde RMP could be more ambitious in this respect. In particular, it could establish zones around those carbon sinks capable of natural regeneration, in which developments and activities will be minimised in order to permit the expansion of the carbon sink over time. Sea grass meadows would be an obvious candidate for such protection, given their potential for growth over a relatively short period of time and the fact that the extent of these habitats is significantly condensed compared to their historic range.

The draft Clyde RMP also does not engage with the question of how specific sectoral pressures on MPAs should be controlled in order to support the overall health of ecosystems therein. In



failing to do so, the draft RMP misses the opportunities for marine planning to be used to 'provide stronger policy protection' to natural heritage by inter alia 'steer[ing] damaging activities away from sensitive features'.<sup>19</sup> One tool to achieve this is ocean zoning, which has been described as a key measure for effective marine spatial planning due to its ability to identify areas where particular activities should be encouraged or discouraged in order to 'protect the natural values of the marine management area while allowing reasonable human uses of the area'.<sup>20</sup> Ocean zoning also provides benefits by offering clearer guidance to potential developers as to where activities may or may not be permitted. In the present context, it may not be appropriate to pursue large-scale zoning of areas in which activities should be prioritised across the region<sup>21</sup>, but nature conservation considerations could be integrated into relevant sectoral chapters of the Clyde RMP, by the introduction of policies to ensure that certain polluting or damaging activities are not supported in or nearby Nature Conservation MPAs unless it can be shown that there is no detrimental impact on marine biological diversity. Such a policy would not affect existing activity, but rather it would be aimed at minimising additional pressure on MPAs by establishing a presumption against authorisation. In developing such policies, particular regard should be had to existing management advice from Scottish Natural Heritage, which

has already identified certain activities whose further expansion should be carefully controlled within MPAs, including finfish farms and shellfish farms in the Upper Loch Fyne and Loch Goil MPA<sup>22</sup> and in the South Arran MPA.<sup>23</sup> Nor is it only aquaculture which could be zoned in this way. An increase in anchorages and moorings may also pose risks to certain seabed habitat and SNH has thus called for caution in consideration of any new proposals in the Upper Loch Fyne and Loch Goil MPA<sup>24</sup> and the need to remove or avoid such pressures in parts of the South Arran MPA.<sup>25</sup> This management advice should be translated into specific policies in the relevant chapters of the Clyde RMP.

Finally, the current text of the draft RMP emphasises the impacts of individual proposals for marine and coastal development and/or activities, but it does not provide sufficient emphasis on cumulative impacts.<sup>26</sup> Yet, the UK Marine Policy Statement expressly provides that marine plans 'should identify how the potential impacts of activities will be managed, including cumulative effects'<sup>27</sup> and other regional marine plans developed in other parts of the United Kingdom have included explicit policies to this end. For example, the East of England Marine Plan provides that '[c]umulative impacts affecting the ecosystem of the East marine plans and adjacent areas (marine, terrestrial) should be addressed in decision-making and plan implementation'.<sup>28</sup> It is recommended that the Clyde RMP sim-

ilarly expressly recognises the need for cumulative impacts to be addressed in decision-making, particularly in relation to proposals or activities taking place in or in close proximity to MPAs and other designated protected areas, due to the need to promote the overall health and ecological integrity of such areas.

## Conclusion

MSP offers many potential benefits to managing competing uses of the marine environment, whilst also ensuring the delivery of key ecosystems goods and services. However, in order to achieve such results, a plan must be sufficiently detailed by 'lay[ing] out the constraints and conditions imposed on such development' and '[providing] direction for further zoning and regulations'.<sup>29</sup> This is particularly true if marine plans are going to support the recovery of degraded marine ecosystems and to promote the resilience of our seas to growing threats such as climate change and ocean acidification. The development of the Clyde RMP offers an exciting opportunity to take such steps in order to ensure that developments within the region are carried out in a sustainable manner, without undermining fragile marine ecosystems. With this in mind, the drafters of the Clyde RMP should draw lessons from international policy and best practices with a view to adopting an ambitious marine planning system. Strengthening protection for the MPA network in the Clyde RMP is one important step in this direction.

## References

<sup>1</sup> For an overview, see J Harrison, 'Sea and Continental Shelf: Reissue', in *The Laws of Scotland: Stair Memorial Encyclopaedia* (2019) paras 26-30.

<sup>2</sup> Marine (Scotland) Act 2010, s. 15(1).

<sup>3</sup> Marine (Scotland) Act 2010, s. 15(3).

<sup>4</sup> F Douvere, 'The importance of marine spatial planning in advancing ecosystem-based sea use management' (2008) 32 *Marine Policy* 762-771; UNESCO, *Marine Spatial Planning: A Step-by-Step Approach* (2009) 10.

<sup>5</sup> Marine (Scotland) Act 2010, s. 5(3).

<sup>6</sup> Marine (Scotland) Act 2010, s.6(2).

<sup>7</sup> The National Outcomes include an environmental outcome which links to Sustainable Development Goal 14 on the protection of life underwater.

<sup>8</sup> Nature Conservation (Scotland) Act 2004, s. 1.

<sup>9</sup> 1992 Convention on Biological Diversity; 1992 OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic.

<sup>10</sup> See e.g. T Agardy et al, 'Mind the gap: Address-

ing the shortcomings of marine protected areas through large scale marine spatial planning' (2011) 35 *Marine Policy* 226-232.

<sup>11</sup> OSPAR Commission, *North-East Atlantic Environment Strategy* (OSPAR Agreement 2010-3) Part II, para. 3.1(c).

<sup>12</sup> CBD/COP/DEC/14/8, Annex I (2018), para. 3.

<sup>13</sup> CBD/COP/DEC/14/8, Annex I (2018), para. A(f).

<sup>14</sup> UNESCO, *Marine Spatial Planning: A Step-by-Step Approach* (2009) 75.

<sup>15</sup> Shetland Islands Marine Spatial Plan (Fourth Edition 2015) 68.

<sup>16</sup> See Clyde Marine Planning Partnership, *Clyde Marine Region Assessment* (2017).

<sup>17</sup> See UK Government et al, *Our Seas – A Shared Resource: High Level Marine Objectives* (2009) 7.

<sup>18</sup> See e.g. Nicola Sturgeon declares climate emergency at SNP conference, BBC News website, 28 April 2019; <https://www.bbc.co.uk/news/uk-scotland-scotland-politics-48077802>

<sup>19</sup> Scottish Natural Heritage, *Marine Planning Position Statement* (2017) 5.

<sup>20</sup> UNESCO, *Marine Spatial Planning: A Step-by-*

*Step Approach* (2009) 78.

<sup>21</sup> See discussion in Clyde Marine Planning Partnership, *Interim Sustainability Appraisal including Strategic Environmental Assessment Report* (2019) 51.

<sup>22</sup> Scottish Natural Heritage, *Upper Loch Fyne and Loch Goil MPA Management Options*, 11 and 13.

<sup>23</sup> Scottish Natural Heritage, *South Arran MPA Management Options*, 11.

<sup>24</sup> Scottish Natural Heritage, *Upper Loch Fyne and Loch Goil MPA Management Options*, 15-16.

<sup>25</sup> *Management Options, South Arran MPA Management Options*, 10.

<sup>26</sup> Policy NH 6 mentions research on cumulative impacts, but there is no mention of cumulative impacts in Policy NH 1 or 2.

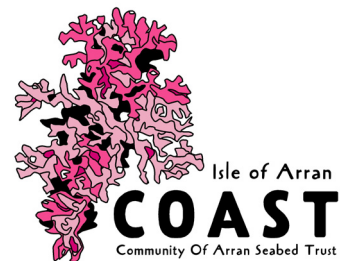
<sup>27</sup> UK Government et al, *United Kingdom Marine Policy Statement* (2011) para. 2.3.1.6.

<sup>28</sup> *East of England Plan, Policy ECO1*. See also *Draft Marine Plan for Northern Ireland* (April 2018) 45.

<sup>29</sup> UNESCO, *Marine Spatial Planning: A Step-by-Step Approach* (2009) 72.



THE UNIVERSITY *of* EDINBURGH  
Edinburgh Law School



This policy brief was written by Prof James Harrison with research assistance by Maia Perraudau.

The views expressed in the policy brief are those of the authors and they cannot be ascribed to any supporting organisations.

This policy brief was produced with funding from the University of Edinburgh College of Arts, Humanities and Social Sciences Impact and Knowledge Exchange Scheme. It was produced in collaboration with the Community of Arran Seabed Trust. It is part of a series which analyses the legal framework for the designation and management of marine protected areas. It focuses on the legal framework in Scotland, but draws upon broader obligations in international law with a view to recommending additional measures or reforms in order to strengthen the protection that is offered to rare and fragile marine ecosystems.

The Saving our Seas Through Law Policy Brief Series includes:

- Briefing 1: The Establishment and Expansion of the Scottish Marine Protected Area
- Briefing 2: The Enforcement of Fishing Restrictions in Marine Protected Areas
- Briefing 3: Using Marine Spatial Planning to Support Marine Protected Area Management
- Briefing 4: Legal Tools for the Management of Marine Protected Areas in Scotland

Visit the project webpage at:

<https://www.law.ed.ac.uk/research/research-projects/saving-our-seas-through-law>

Front image: Photograph by Mike Peel ([www.mikepeel.net](http://www.mikepeel.net)).

For further information, contact us:

**Prof James Harrison**

Professor of Environmental Law

Edinburgh Law School

[james.harrison@ed.ac.uk](mailto:james.harrison@ed.ac.uk)

[www.law.ed.ac.uk](http://www.law.ed.ac.uk)